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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,331	10/31/2003	Uwe Liess	02P15832	8526
24252	7590	12/14/2004	EXAMINER	
OSRAM SYLVANIA INC 100 ENDICOTT STREET DANVERS, MA 01923			TRAN, THUY V	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/697,331

**Applicant(s)**

LIESS ET AL.

**Examiner**

Thuy V. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This is a response to the Applicants' filing on 10/31/2003. In virtue of this filing, claims 1-10 are currently presented in the instant application.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Inventorship***

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

#### ***Drawings Objections***

3. The drawings are objected to because Figs. 1 and 2A-2C are not labeled correctly.

4. Figures 1 and 2A-2C should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

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should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Abstract Objection***

5. The abstract of the disclosure is objected to because of the following informality:
- Lines 11-12, “means of” should be deleted.
- Correction is required. See MPEP § 608.01(b).

***Specification Objections***

6. The disclosure is objected to because of the following informalities:
- Page 6, line 5, “figure 3 shows” should be changed to --figures 3a, 3b, and 3c show--.
- Appropriate correction is required.

***Claim Objections/ Minor Informalities***

7. Claims 1 and 4-6 are objected to because of the following informalities:
- Claim 1, line 5 (blank line counted), “the” should be deleted;
- Claim 1, line 14 (blank lines counted), “lamp” should be changed to --lamps--;

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Claim 1, line 17 (blank lines counted), “device” should be changed to --devices--; and  
“the” (first occurrence) should be changed to --a--;

Claim 1, line 18 (blank lines counted), --the-- should be inserted between “with” and  
“heating”;

Claim 4, line 3, “a” should be changed to --the--;

Claim 5, line 3, “a” should be changed to --the--; and

Claim 6, line 3, “can be” should be changed to --is--.

Appropriate correction is required.

***Claim Objection/ Improper dependent claim***

8. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. While “An electronic ballast for operating discharge lamps” is the preamble of the claim, the limitation “a device” which was recited in the previous claim 1 does not constitute any further limitation. Therefore, this claim is not treated on the merits.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-6 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Bessone et al. (U.S. Patent No. 4,010,399).

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With respect to claim 1, Bessone et al. discloses, in Fig. 1, a device for operating two discharge lamps [L1, L2] having (1) a coupling-out device [S5, T] for coupling out a heating current for incandescent filaments [f] of the discharge lamps [L1, L2] from a supply branch [T1, T2, PFC] of the device; the coupling-out device [S5, T] having a current control device [S5] for controlling the heating current (see col. 1, lines 61-68), and a heating transformer unit [T], and (2) a first contact device [t, t2] (for lamp L1; see Fig. 1) connected to the supply branch, and a second contact device [t, t2] (for lamp L2; see Fig. 1) for making contact with the first and second discharge lamps [L1, L2], a secondary coil unit [T3, T4, T5] of the heating transformer unit being connected to the first and second contact devices for the purpose of supplying the incandescent filaments [f] with the heating current.

With respect to claim 2, Fig. 1 of Bessone et al. shows that the secondary coil unit [T3, T4, T5] comprises three coils, specifically a first secondary coil [T3] for supplying a first incandescent filament of the first discharge lamp [L1], a second secondary coil [T4] for supplying a second incandescent filament of the first discharge lamp [L1] and a first incandescent filament of the second discharge lamp [L2], and a third secondary coil [T5] for supplying a second incandescent filament of the second discharge lamp [L2].

With respect to claim 3, Fig. 1 of Bessone et al. shows that the supply branch comprises a resonance capacitor [PFC] and a resonance inductor [T1, T2].

With respect to claim 4, Fig. 1 of Bessone et al. shows that the resonance inductor [T1, T2] constitutes the primary coil of the coupling-out transformer unit [T] whose secondary coil drives the coupling-out device.

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With respect to claim 5, Fig. 1 of Bessone et al. shows that the resonance inductor [T1, T2] is bipartite, and portion [T1] thereof constitutes the primary coil of the coupling-out transformer unit [T] for driving the coupling-out device.

With respect to claim 6, Fig. 1 of Bessone et al. shows that the resonance inductor [T1, T2] has a tap (see dot between T1 and T2 in Fig. 1) via which the coupling-out device is driven.

With respect to claim 9, Fig. 1 of Bessone et al. shows an electronic ballast (see col. 1, line 56) having the device of claim 1.

With respect to claim 10, Bessone et al. discloses, in Fig. 1, a ballast device and a corresponding method for operating two discharge lamps [L1, L2] that are supplied with power via a supply branch [T1, T2, PFC], characterized in that the entire power for preheating incandescent filaments [f] of the discharge lamps [L1, L2] is coupled out inductively (due to coils configured in transformer T) from the supply branch.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bessone et al. (U.S. Patent No. 4,010,399) in view of Pak (U.S. Patent No. 6,731,075).

With respect to claim 7, Bessone et al. discloses all of the claimed subject matter, as expressly recited in claim 1, except for a sequential starting capacitor being connected in parallel with the first or second contact device.

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Pak discloses, in Fig. 3, a start-up circuit employing a sequential starting capacitor [113] connected in parallel with a contact device (which includes contact at two terminals of lamp [112]; see Fig. 3; col. 5, line 66 – col. 6, line 2).

It would have been obvious to one of ordinary skills in the art at the time of the invention to modify the ballast device of Bessone et al. by additionally arranging a sequential starting capacitor in parallel with the first or second contact device of Bessone et al. for timing control since the use of such capacitor for the stated purpose has been well known in the art as evidenced by the teachings of Pak (see col. 3, lines 5-6).

13. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bessone et al. (U.S. Patent No. 4,010,399) in view of Nostwick (U.S. Patent No. 6,724,152).

With respect to claim 8, Bessone et al. discloses all of the claimed subject matter, as expressly recited in claim 1, except that the current control device comprises a thermistor.

Nostwick discloses, in Fig. 2, a lighting control system employing a current control device, which is a thermistor [TH1], at an input power source [16].

It would have been obvious to one of ordinary skills in the art at the time of the invention to modify the ballast device of Bessone et al. by replacing the control switch [S5] of Bessone et al. with a thermistor to control or limit inrush current amplitude upon application of input power since such a use of the thermistor for the stated purpose has been well known in the art as evidenced by the teachings of Nostwick (see col. 5, lines 10-12).



***Citation of relevant prior art***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Rudolph et al. (U.S. Patent No. 6,806,657) discloses a device for operating discharge lamps.

Prior art Pinchuk et al. (U.S. Patent No. 6,348,769) discloses an electronic ballast.

Prior art Wood (U.S. Patent No. 5,932,974) discloses a ballast circuit.

Prior art Wood (U.S. Patent No. 5,612,597) discloses a ballast circuit.

Prior art Brooks (U.S. Patent No. 5,432,406) discloses a device for operating fluorescent lamp load.

Prior art Swanson et al. (U.S. Patent No. 5,021,714) discloses a device for operating fluorescent lamps.

Prior art Stupp et al. (U.S. Patent No. 4,560,908) discloses a device for operating discharge lamps.

Prior art Hirayama et al. (U.S. Patent No. 4,547,705) discloses a device for operating discharge lamps.

Prior art Knoll et al. (U.S. Patent No. 4,392,085) discloses a ballast circuit.

Prior art Hallay (U.S. Patent No. 3,921,032) discloses a thermal regulator ballast.

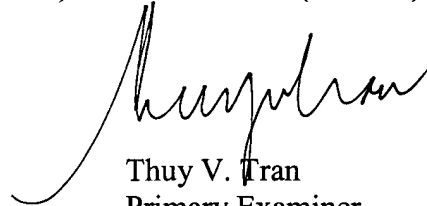
***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Thuy V. Tran', is positioned above the printed name and title.

Thuy V. Tran  
Primary Examiner  
Art Unit 2821

12/11/2004